

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---|-----------------|----------------------|---------------------|------------------|--|
| 10/606,783 | 06/27/2003 | Tertius F. Dreyer | 4000-3 | 9701 | |
| 23117 | 7590 09/02/2005 | | EXAM | INER | |
| NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR | | | RIDLEY, F | RIDLEY, RICHARD | |
| ARLINGTON, VA 22203 | | | ART UNIT | PAPER NUMBER | |
| | | | 3651 | | |

DATE MAILED: 09/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|---|---|----------------------------------|--|--|--|--|
| Office Action Comments | 10/606,783 | DREYER, TERTIUS F. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Richard Ridley | 3651 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 23 February 2005. | | | | | | |
| 2a) ☐ This action is FINAL . 2b) ☑ This | This action is FINAL . 2b)⊠ This action is non-final. | | | | | |
| , — | ·— · · · · · · · · · · · · · · · · · · | | | | | |
| closed in accordance with the practice under E | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 1-18 is/are pending in the application. | | | | | | |
| · · · · · · · · · · · · · · · · · · · | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| | 6) Claim(s) 1-18 is/are rejected. | | | | | |
| , | 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. | | | | | |
| o) Claim(s) are subject to restriction und/or election requirement. | | | | | | |
| Application Papers | · | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | | |
| 10)⊠ The drawing(s) filed on <u>23 February 2005</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| The dath of declaration is objected to by the Examiner. Note the attached office Action of form 1 10-102. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summary | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | ate ratent Application (PTO-152) | | | | |

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagerman et al. USP 4314631in view of Maurer USP 4548316.

Hagerman disclose a similar device comprising a (n):

- Conveyor idler (32) including an outer surface and an inner surface (C2/L39-42)
- Conveyor belt (12)
- > Shaft (36)
- > Frame (fig. 1)
- Locking mechanism (C2/L39-42) for preventing the sleeve from rotating in the reverse direction

While Hagerman does indeed disclose a braking mechanism inside the conveyor idler (32), he does not comprising at least one brake element which can move between an unlocked position in which the sleeve can rotate in the forward direction, and a locked position in which the locking mechanism element locks the sleeve to the shaft.

Application/Control Number: 10/606,783 Page 3

Art Unit: 3651

Mauer teaches the use of a similar locking mechanism (fig. 5) comprising at least one brake element which can move between an unlocked position in which the sleeve can rotate in the forward direction, and a locked position in which the locking mechanism element locks the sleeve to the shaft (62) for the purpose of providing for a means to provide for a one-way clutch that prevents reverse rotation of a roller (at least abstract).

It would have been obvious to one having ordinary skill in the art at the time of the invention to have employed the use of a brake element, as taught by Mauer, in the device of Hagerman for the purpose of providing for a means to provide for a one-way clutch that prevents reverse rotation of a roller.

Re clms 2, 3, 4, 5, 6, 7, 8, 9, 11 it would have been obvious in view of Mauer to have employed the use of Outer surface with a plurality of spaced ramps (fig. 5, 65), Ball bearing or roller bearing (62), Rotatable member (on either side of ramps 61 in fig. 6) for the purpose of providing for a means to prevent reverse directional movement of a roller.

Re clm 10, it would have been obvious to one having ordinary skill in the art at the time of the invention to have employed the use of weld connection since connect via welding was well known of at the time of the invention for the purpose of providing for a means to fasten.

3. Claims 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagerman et al. USP 4314631in view of Maurer USP 4548316.

Hagerman disclose a similar device comprising a (n):

- ▶ Idler (32) having an outer surface and an inner surface (C2/L39-42)
- Conveyor belt (12)

Art Unit: 3651

> Shaft (36)

> Frame (fig. 1)

➤ Braking mechanism (C2/L39-42) for preventing the idler from rotating in the reverse direction.

While Hagerman does indeed disclose a braking mechanism inside the idler (32), he does not disclose the Braking mechanism comprising at least one brake element that can move between a first position in which the idler can rotate in the forward direction, and a second position in which the brake element prevents the idler from rotating in the reverse direction.

Mauer teaches the use of a similar braking mechanism (fig. 5) comprising at least one brake element (62) for the purpose of providing for a means to provide for a one-way clutch that prevents reverse rotation of a roller (abstract).

It would have been obvious to one having ordinary skill in the art at the time of the invention to have employed the use of a brake element, as taught by Mauer, in the device of Hagerman for the purpose of providing for a means to provide for a one-way clutch that prevents reverse rotation of a roller.

Re clms 13-18 it would have been obvious to have employed the use of a brake guide secured to a shaft, brake guide having an outer surface with a plurality of recesses each having a brake surface, said brake element is a ball bearing or a roller bearing, in view of Mauer who teaches a brake guide (61) secured to a shaft (60), brake guide having an outer surface with a plurality of recess (brake element 62 sits in recess) each having a brake surface (65), said brake

Art Unit: 3651

element (62) is a ball bearing or a roller bearing, for the purpose of providing for a means to

prevent reverse directional movement of a roller.

a brake guide secured to a shaft, brake guide having an outer surface with a plurality of

recess each having a brake surface, said brake element is a ball bearing or a roller bearing, a key

and keyway, in view of Mauer who teaches a brake guide (61) secured to a shaft (60), brake

guide having an outer surface with a plurality of recess (brake element 62 sits in recess) each

having a brake surface (65), said brake element (62) is a ball bearing or a roller bearing, and also

teaches a key and keyway (fig. 5)

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

5. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Richard Ridley whose telephone number is (571) 272-6917. The

examiner can normally be reached on Mon-Fri 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/606,783 Page 6

Art Unit: 3651

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Richard Ridley Primary Examiner Art Unit 3651

Richard Ridley 31 Aug 2005